

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a personal interview with Eric Sophir (48499) on 05/20/2011 final agreement on the language of the limitations was reached on 05/20/2011.

Status of Claims

2. In Applicant's amendment received 12/15/2011 claims 1-42 were pending. Claim 24 was amended.
3. In the Examiner's Amendment claims 24, 30, 32-35, and 37-39 are amended. Claim 43-46 are newly added. Claims 1-23, 36 and 40-42 are canceled.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 05/19/2011 was considered by the Examiner in the prosecution of the claims in the instant application.

In the Claims

5. The Examiner's Amendment cancels claims 1-23, 36 and 40-42. Claims 24, 30, 32-35, and 37-39 are amended. Claim 43-46 are newly added.

1. - 23. (Canceled)

24. (Currently Amended) A method for analyzing a business initiative for a business network including business locations including test sites that have implemented the business initiative during a predetermined test period and non-test group sites that have not implemented the initiative, each of the sites being associated with a set of attributes, the method comprising:

generating test site fragments based on the value of each attribute and performance value for each test site;

generating control site fragments based on the value of each attribute and performance value for each control group site, where the non-test group sites include a set of control group sites;

determining the strength relationship of the between each attribute and the performance values of the test sites based on an analysis between selected test site fragments and corresponding control site fragments;

receiving ~~generating, from~~ by a server, a list of the attributes ranked based on the strength relationship between the attribute and performance value for each control group site ~~each attribute's impact on performance values associated with the test sites during the test period;~~

configuring a model to predict the performance value of the sites based on the ranked list of attributes; and

~~instructing the server to execute the model for the test sites;~~

~~receiving results of the executed model, wherein the results include quantitative measures of the model's ability to accurately predict the performance levels of the test sites;~~

instructing the server to apply the model to the non-test group sites to predict the performance levels of the non-test group sites ~~that have not implemented the business initiative to predict the performance levels of the non-test group sites, wherein such~~ prediction can be used to decide whether to implement the business initiative based on a determination that the model accurately predicts the performance levels of the test sites; and

~~receiving a list of non-test group sites ranked based on each non-test group site's predicted performance level.~~

25. (Original) The method of claim 24, further comprising:

selecting a subset of the non-test group sites to implement the business initiative based on the ranked list of those sites.

26. (Previously Presented) The method of claim 24, wherein configuring the model includes:

selecting the model from a list of models provided by the server; and

selecting one or more parameters for the selected model.

27. (Original) The method of claim 24, wherein receiving results of the executed model further includes:

reconfiguring the model with at least one new parameter based on a determination that

the model does not accurately predict the performance levels of the test sites; and instructing the server to execute the reconfigured model for the test sites.

28. (Original) The method of claim 27, further comprising:

repeating the reconfiguring and executing the reconfigured model until the quantitative measure reflect that the model accurately predicts the performance levels of the test sites.

29. (Original) The method of claim 24, wherein configuring the model includes:

selecting a number of the ranked attributes that the model should consider when executing.

30. (Currently Amended) The method of claim 24, receiving results of the executed model, wherein the results include quantitative measures of the model's ability to accurately predict the performance levels of the test sites, wherein the quantitative measures includes a ranked list of selected attributes that the model considered during its execution and data values assigned to each of the selected attributes by the model.

31. (Original) The method of claim 30, wherein the data values includes a coefficient data value for a mathematical function used by the model to generate the results.

32. (Currently Amended) The method of claim 24, ~~wherein the non-test group sites includes a set of control group sites and~~ wherein the list of the attributes ranked based on each attribute's impact on the test site performance values is generated by the server based on comparisons between test site fragments and corresponding control group site fragments, ~~wherein each fragment is generated by the server based on each respective site's attribute value and performance value.~~

33. (Currently Amended) A ~~method implemented by a~~ computer program product, ~~having a~~ comprising a non-transitory computer readable media having computer program code therein, said computer program code adapted to cause a computer to perform the following steps of: for

analyzing a business initiative for a business network including business locations having sites including test sites that have implemented the business initiative during a predetermined test period and non-test group sites that have not implemented the initiative, each of the sites being associated with a number of attributes, wherein the non-test group sites includes a set of control group sites, the method comprising:

providing a computer system, wherein the system comprises computer program code adapted for analyzing a business initiative for a business network including business locations having sites including test sites that have implemented the business initiative during a predetermined test period and non-test group sites that have not implemented the initiative, each of the sites being associated with a number of attributes;

determining, by the computer system, the impact of each of the attributes on performance values of the test sites during the test period by:

segmenting the test sites into fragments based on a selected attribute and the performance value for the test sites,

segmenting the control group sites into fragments based on the selected attribute and the performance value for the control group sites, and

determining the strength of the relationship between the selected attribute and the test site performance values based on a comparison of the test site fragments and corresponding control group fragments;

configuring, ~~by the computer system,~~ a model, based on user input associated with the attributes, that predicts performance values of the test sites in relation to actual performance values of the test sites during the test period,

~~executing, by the computer system, the model for the test sites to produce results reflecting the model's ability to accurately predict the performance values of the test sites,~~

~~reconfiguring, by the computer system, the model based on additional user input associated with the attributes, and~~

executing, ~~by the computer system,~~ the model for the non-test group sites to produce predicted performance values for the non-test group sites when implementing the business initiative.

34. (Currently Amended) The ~~method~~ computer program product of claim 33, wherein the ~~memory~~ computer program code further includes program code for providing a user with a list of non-test group sites ranked according to each non-test group site's predicted performance value.

35. (Currently Amended) The ~~method~~ computer program product of claim 34, further including operating by ~~wherein the user operates~~ a client remotely located from the system.

36. (Canceled)

37. (Currently Amended) The ~~method~~ computer program product of claim 34, wherein the user input associated with the attributes includes a user selection of one or more of the attributes that are to be considered by the model when executed.

38. (Currently Amended) The ~~method~~ computer program product of claim 37, wherein the computer program code for reconfiguring the model includes program code for receiving instructions from the user to remove at least one of the selected one or more attributes from consideration by the model.

39. (Currently Amended) The ~~method~~ computer program product of claim 34, wherein the computer program code for executing the model for the test sites includes program code for configuring the model using a subset of the test sites and testing the model's ability to accurately predict performance values by predicting the performance values of test sites not included in the subset of test sites.

40. - 42. (Canceled)

43. (New) The method of claim 24, further comprising:

instructing the server to execute the model for the test sites; and

receiving results of the executed model, wherein the results include quantitative measures of the model's ability to accurately predict the performance levels of the test sites.

44. (New) The method of claim 24, further comprising generating a list of non-test group sites ranked based on each non-test group site's predicted performance level.

45. (New) The ~~method~~ computer program product of claim 33, further comprising executing, ~~by the computer system~~, the model for the test sites to produce results reflecting the model's ability to accurately predict the performance values of the test sites.

46. (New) The ~~method~~ computer program product of claim 33, further comprising reconfiguring, ~~by the computer system~~, the model based on additional user input associated with the attributes.

Reasons for Allowance

6. Claims 24-35, 37-39 and 43-46 are allowed.

7. The following is the Examiner's statement of reasons for allowance:

The non-obvious features of the instant invention center on the claimed limitations of "generating test site fragments based on the value of each attribute and

performance value for each test site; generating control site fragments based on the value of each attribute and performance value for each control group site, where the non-test group sites include a set of control group sites; determining the strength relationship of the between each attribute and the performance values of the test sites based on an analysis between selected test site fragments and corresponding control site fragments" as recited in independent claim 24 and "determining, the impact of each of the attributes on performance values of the test sites during the test period by: segmenting the test sites into fragments based on a selected attribute and the performance value for the test sites, segmenting the control group sites into fragments based on the selected attribute and the performance value for the control group sites, and determining the strength of the relationship between the selected attribute and the test site performance values based on a comparison of the test site fragments and corresponding control group fragments" as recited in independent claim 33; where both claims steps are taken in the context of creating a "model for the non-test group sites to produce predicted performance values for the non-test group sites when implementing the business initiative."

Previously cited art, Pednault et al (US Patent 7,451,065) teaches data mining and knowledge discovery. The Pednault teaches an invention that specifically relates to a method for constructing segmentation-based predictive models wherein data records are partitioned into a plurality of segments and separate predictive models are constructed for each segment. Pednault further teaches that the predictive model is one that could obtain using standard linear regression techniques. However Pednault

does not use test, non-test, and control sites to train the model, to generate the fragmentation of the data or make predications on non-test sites.

The previously uncited art of Kimes teaches in the article "Selecting Profitable Hotel Sites at La Quinta Motor Inns" teaches a system to identify the characteristics of hotel sites that would predict their attractiveness to potential guest. The system of makes the identifications using defined variables that facilitate accurate data collection and measure the market within a four mile area. The variables are then classified. These variables are used to develop a model; however the variables are not used to segmenting the control group or test sites into fragments in order to make a prediction on the performance of a non-test site.

A combination of the previously or newly cited closely related art would not render the instant invention obvious as a combination of old elements. Nor would one of ordinary skill in the art at the time the invention was made be able to make a simple substitution of features in the teachings of the prior art without the use of hindsight reasoning. One of ordinary skill in the art would not have recognized a combination capable of rendering a predictable result of the instant application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Eastlack, Joseph O., Jr., Rao, Ambar G., Dodson, Joe, & McNiven, Malcolm A.. (1989). **Advertising Experiments at the Campbell Soup Company; Commentaries; Reply.** *Marketing Science*, 8(1), 57. teaches a measure of actual-to-forecast sales has proven to be a good way to quantify the impact of advertising
- Kimes, Sheryl E., & Fitzsimmons, James A.. (1990). **Selecting Profitable Hotel Sites at La Quinta Motor Inns.** *Interfaces*, 20(2), 12. teaches regression model was created for La Quinta that predicted profitability for sites under consideration. The regression model was validated on new data, and it was incorporated into a spreadsheet decision model that management uses for selecting sites. The model minimizes the risk of picking an unprofitable site
- Rogers, David. (1992). **A Review of Sales Forecasting Models Most Commonly Applied in Retail Site Evaluation.** *International Journal of Retail & Distribution Management*, 20(4), 3. teaches a multiple discriminate analysis has many similarities to multiple regression analysis. Typically, the technique is employed as a site-screening tool or as a decision system for relatively low-investment risk situations

- **Applied Predictive Technologies Announces Launch of Adaptive Marketing Suite For Online and Brick-and-Mortar Channels.** (2 January). *PR Newswire*, 1. teaches an adaptive Customer Relationship Management (CRM) marketing optimization software platforms for online and brick-and-mortar businesses, today announced the launch of its Adaptive Marketing Suite v1.0. The first-of-its-kind product suite leverages a company's existing CRM system or data gathering efforts and accurately predicts customer behavior to help companies optimize marketing programs executed through multiple channels
- **Boosting Customer Response: Mercer Management Consulting And Applied Predictive Technologies Form Marketing Alliance.** (12 March 2001). *PR Newswire*, 1. teaches scientific marketing approach to today's multi-channel marketing environment. By testing a finite number of scientifically-chosen marketing stimuli with a relatively small sample of potential customers, the Nexperiment methodology allows businesses to predict the results of nearly infinite marketing campaigns, offers, prices, promotions, and messages
- Deborah Szygal. (2002, April). **New to you.** *Marketing News*, 36(7), 23. teaches software is a collaboration tool that enables marketers to manage their marketing projects in accordance with the budget, and then share that information with fellow marketing team members or affiliates

- Amato-McCoy, D.. (2010, April). **Focus on: Business Analytics.** *Chain Store Age*, 86(4), 71-73. teaches Test and Learn process has two important factors. The first is Family Dollar's relationship with its five-year partner, Applied Predictive Technologies. The second component is Family Dollar's use of the APT technology across test and control stores, which are locations where the chain conducts and measures all concepts. Family Dollar has successfully applied its Test and Learn methodology in such departments as loss prevention, facilities, merchandising and marketing
- Pednault et al (US Publication **2003/0176931** A1) teaches data mining and knowledge discovery. The invention specifically relates to a method for constructing segmentation-based predictive models
- Howarth (US Publication **2006/0195370**) teaches the results of the teachings can be measured by comparing the sales performance of SKU/store, a test group, combinations where corrective action has been taken against a control group of stores where no action has been taken. An ongoing analysis of the test and control group performance versus a pre-project base period can be performed. The ongoing analysis can also measure test group performance versus control group performance
- Cheng (US Patent **6,055,524** A) teaches a control algorithm based on a predictive model of the process. The model is used to predict the future output based on the historical information of the process as well as the future input. It emphasizes the function of the model, not the structure of

the model. Therefore, state equation, transfer function, and even step response or impulse response can be used as the predictive model. The predictive model has the capability of showing the future behavior of the system. Therefore, the designer can experiment with different control laws to see the resulting system output, by doing a computer simulation

- Delurgio et al (US Patent **6,553,352** B2) teaches group builder, window provides the user with a plurality of selection buttons/Boolean controls along with a plurality of choosers to enable the configuration of store groups having a complex relationship. The group builder tool is useful for client data sets that comprise thousands of stores where it is difficult to prescribe grouping relationships simply by selection
- Phillips et al (US Patent **7,072,863** B1) teaches a contest in which the rankings and/or rewards are tied more closely to the forecasting characteristics that are most desirable and that yields a large database of information which can serve as the basis for comparing the predictions of different forecasters
- Luby et al (US Patent **7,080,027** B2) teaches a method and system for analyzing a "detail" (the use of promotional materials in combination with a sales pitch), using consistent measures to provide comparisons of effectiveness across industry and time and to predict success of the campaign in the marketplace

- Delurgio et al (US Patent **7,092,896** B2) teaches a generating a plurality of optimization results templates and providing these templates to the user, wherein optimum promotion events and optimum supplier offers are presented.
- Louviere et al (US Patent **7,308,497** B2) teaches a communication management system may cooperate with content system to break down any given content to its elemental components, create one or more content structures or treatments for presenting the content to users, design experiments to test the behavior or reaction of users to each treatment, deliver the treatments over a suitable data network to one or more users in controlled experiments, collect information or data on the outcomes/objectives for each experiment, generate predictive models using the collected information, and modify or customize the structure of content using the predictive models
- Bailey (US Patent **7,412,398**) teaches a method involving weighing a set of bands according to a market-related factor including weighting data within a market area and applying individual weights to the bands. A net demand model is applied to the weighted bands. A result corresponding to the net demand model is generated, and the result is stored, where the result is an indicator of the market. The bands are clustered to form a smaller number of bands. The result is validated, and the market area is

defined using travel time. Block groups are accepted within the market area based on rules.

- Sharp (US Patent **7,526,434** B2) teaches marketing management method and a system to manage interactions, develop base line for the current performance, analyzing various marketing strategies and selecting a desirable marketing strategy for implementation
- Tobin (Patent **7,729,931** B1) teaches an analysis of the logged model is performed to determine model parameters related to the revenue. A revenue score and sales parameter score for the sales regions are produced based on a revenue norm and sales parameter norm for the sales regions
- Phelan et al (Patent **7,904,327** B2) teaches a marketing optimization module automatically organizes at least a part of the multi-dimensional marketing data into one or more marketing categories. The marketing optimization module then analyzes all of or a part of the multi-dimensional marketing data to facilitate the optimization of a marketing investment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FOLASHADE ANDERSON whose telephone number is (571)270-3331. The examiner can normally be reached on Monday through Thursday 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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